

Serial Number: 10/029,654

**ENTERED**

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file;  
☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_



OIKE

## RAW SEQUENCE LISTING

DATE: 01/24/2002

PATENT APPLICATION: US/10/029,654

TIME: 18:40:23

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01242002\J029654.raw

```

3 <110> APPLICANT: Boehringer Ingelheim Pharma KG
5 <120> TITLE OF INVENTION: Methods for identifying substances for treating
6   inflammatory conditions
8 <130> FILE REFERENCE: 1/1178
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/029,654
C--> 11 <141> CURRENT FILING DATE: 2001-12-21
13 <150> PRIOR APPLICATION NUMBER: US 60/257,878
14 <151> PRIOR FILING DATE: 2000-12-22
16 <160> NUMBER OF SEQ ID NOS: 20
18 <170> SOFTWARE: PatentIn Ver. 2.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 2167
22 <212> TYPE: DNA
23 <213> ORGANISM: Homo sapiens
25 <400> SEQUENCE: 1
26 ctgcaggaac caatacccat aggetatttg tataaatggg ccatggggcc tcccagctgg 60
27 aggetggctg gtgccacgag ggtccacacg gcatgggtgt ccttcctata tcacatggcc 120
28 ttactgaga ctggtatatg gattgcacct atcagagacc aaggacagga cctccctgga 180
29 aatctctgag gacctggcct gtgatccagt tgctgccttg tctcttctct gctatgtcat 240
30 ggcttatett ctttcaccca ttcaattcatt cattcattca ttcagcagta ttagtcaatg 300
31 tctcttgata tgcctggcac ctgctatgat gtccccgagt ttaccattag tggaaaagac 360
32 atttaagaaa ttaccaaagg gctctatgat agggccataca cgggtggacct gactaggggtg 420
33 tggcttccct gaggagctga agttgcccag agggccagag aaggggagct gagcacgttt 480
34 gaaccactga acctgctctg gacctcgcct ccttccttcg gtgcctccca gcatcctatc 540
35 ctctttaaag agcaggggtt cagggaaagt ccctggatgg tgattcgagc gggcagctcc 600
36 cctctcacct gccgcatgac taccgccccc catctcaaac acacaagctc acgcatgcgg 660
37 gactggagcc cttgaggaca tgtggcccaa agacaggagg tacaggggct cagtgcgtgc 720
38 agtggaatga actgggcttc atctctggaa gggtaaaggg ccactcttccg ggttcaccgc 780
39 cgcaccccca ccccggcac agcgccctct ggcgactaac atcggtgact tagtgaaagg 840
40 actaagaaag acccgaggcg agggccgaac agggcgattt ctaggcccca agtggagaac 900
41 aggttgagc ggtgcgcccg gcttagcggc ggttgctgga ggaacgggag gagtcgcccc 960
42 gggtcctgcc ctgcgggggt cgagccgagg caggcggtga cttccccact cggggcgagg 1020
43 ccgcagcctc gcggggggcg ggcctggcgc cggcggtggc gtcacaaaag gcgggaccac 1080
44 agtgggtgcc gagaagtcag gcacgtagct cagcggcggc cgcggcgctg gcgtctgtgc 1140
45 ctctgcgagg gtctcctggt ccttctgcca tcatgccgat gttcatcgta aacaccaacg 1200
46 tgccccgcgc ctccgtgccg gacgggttcc tctccgagct caccagcag ctggcgagg 1260
47 ccaccggcaa gccccccag gtttgccggg aggggacagg aagagggggg tgcccaccgg 1320
48 acgaggggtt ccgcgctggg agctggggag gcgactcctg aacggagctg gggggcgagg 1380
49 cggggggagg acggtggctc gggcccgaag tggacgttcg gggcccagc aggtcgctgg 1440
50 ggcgggctga ccgcgccctt tctcgcagat acatcgcggt gcacgtggtc ccggaccagc 1500
51 tcatggcctt cggcggtctc agcgagccgt gcgcgctctg cagcctgcac agcatcgcca 1560
52 agatcgcgcg cgcgcagaac cgctcctaca gcaagctgct gtgcggcctg ctggccgagc 1620
53 gcctgcgcat cagcccgagc aggtacgcgg agtcgcggag gggcggggga gggcgggcgg 1680

```

## RAW SEQUENCE LISTING

DATE: 01/24/2002

PATENT APPLICATION: US/10/029,654

TIME: 18:40:23

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01242002\J029654.raw

```

54 cgcgcgggcca ggcccggggac tgagccacccc gctgagtcg gctcctccc cccgcagggt 1740
55 ctacatcaac tattacgaca tgaacgcggc caatgtgggc tggaacaact ccaccttcgc 1800
56 ctaagagccg cagggaccca cgctgtctgc gctggctcca cccgggaacc cgccgcacgc 1860
57 tgtgttctag gcccgccac cccaaccttc tgggtggggag aaataaacgg tttagagact 1920
58 aggagtgcct cggggttcct tggcttgccg gaggaattgg tgcagagccg ggacattggg 1980
59 gagcgaggtc gggaaacggg gttgggggcg ggggtcaggg ccgggttgct ctcctcgaac 2040
60 ctgctgttcg ggagcccttt tgtccagcct gtccctccta cgctcctaac agaggagccc 2100
61 cagtgtcttt ccattctatg gcgtacgaag ggatgaggag aagttggcac tctgccctgg 2160
62 gctgcag 2167

```

65 &lt;210&gt; SEQ ID NO: 2

66 &lt;211&gt; LENGTH: 115

67 &lt;212&gt; TYPE: PRT

68 &lt;213&gt; ORGANISM: Homo sapiens

70 &lt;400&gt; SEQUENCE: 2

```

71 Met Pro Met Phe Ile Val Asn Thr Asn Val Pro Arg Ala Ser Val Pro
72   1           5           10           15
74 Asp Gly Phe Leu Ser Glu Leu Thr Gln Gln Leu Ala Gln Ala Thr Gly
75           20           25           30
77 Lys Pro Pro Gln Tyr Ile Ala Val His Val Val Pro Asp Gln Leu Met
78           35           40           45
80 Ala Phe Gly Gly Ser Ser Glu Pro Cys Ala Leu Cys Ser Leu His Ser
81           50           55           60
83 Ile Gly Lys Ile Gly Gly Ala Gln Asn Arg Ser Tyr Ser Lys Leu Leu
84           65           70           75           80
86 Cys Gly Leu Leu Ala Glu Arg Leu Arg Ile Ser Pro Asp Arg Val Tyr
87           85           90           95
89 Ile Asn Tyr Tyr Asp Met Asn Ala Ala Asn Val Gly Trp Asn Asn Ser
90           100          105          110
92 Thr Phe Ala
93           115

```

96 &lt;210&gt; SEQ ID NO: 3

97 &lt;211&gt; LENGTH: 699

98 &lt;212&gt; TYPE: DNA

99 &lt;213&gt; ORGANISM: Homo sapiens

101 &lt;400&gt; SEQUENCE: 3

```

102 catccggtgt ggtcgacggg tcctccaaga gtttggggcg cggaccggag taccttgct 60
103 gcagttatgt cggcgtcggg agtgtctgtc atttcgcggt tcttagaaga gtacttgagc 120
104 tccactccgc agcgtctgaa gttgctggac gcgtacctgc tgtatatact gctgaccggg 180
105 gcgctgcagt tcggttactg tctcctcgtg gggaccttcc ccttcaactc ttttctctcg 240
106 ggcttcatct cttgtgtggg gagtttcatc ctagcggttt gcctgagaat acagatcaac 300
107 ccacagaaca aagcggattt ccaaggcatc tccccagagc gagcctttgc tgattttctc 360
108 tttgccagca ccattcctgca ccttggtgtc atgaactttg ttggctgaat cattctcatt 420
109 tacttaattg aggagtagga gactaaaaga atgttccactc tttgaatttc ctggataaga 480
110 gttctggaga tggcagctta ttggacacat ggattttctt cagatttgac acttactgct 540
111 agctctgctt tttatgacag gagaaaagcc cagagttcac tgtgtgtcag aacaactttc 600
112 taacaaacat ttattaatcc agcctctgcc tttcattaaa tgtaaccttt tgctttccaa 660
113 attaaagaac tccatgccac tcctcaaaaa aaaaaaaaaa 699

```

116 &lt;210&gt; SEQ ID NO: 4

117 &lt;211&gt; LENGTH: 113

## RAW SEQUENCE LISTING

DATE: 01/24/2002

PATENT APPLICATION: US/10/029,654

TIME: 18:40:23

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01242002\J029654.raw

```

118 <212> TYPE: PRT
119 <213> ORGANISM: Homo sapiens
121 <400> SEQUENCE: 4
122 Met Ser Ala Ser Val Leu Ser Val Ile Ser Arg Phe Leu Glu Glu Tyr
123   1           5           10           15
125 Leu Ser Ser Thr Pro Gln Arg Leu Lys Leu Leu Asp Ala Tyr Leu Leu
126           20           25           30
128 Tyr Ile Leu Leu Thr Gly Ala Leu Gln Phe Gly Tyr Cys Leu Leu Val
129           35           40           45
131 Gly Thr Phe Pro Phe Asn Ser Phe Leu Ser Gly Phe Ile Ser Cys Val
132           50           55           60
134 Gly Ser Phe Ile Leu Ala Val Cys Leu Arg Ile Gln Ile Asn Pro Gln
135   65           70           75           80
137 Asn Lys Ala Asp Phe Gln Gly Ile Ser Pro Glu Arg Ala Phe Ala Asp
138           85           90           95
140 Phe Leu Phe Ala Ser Thr Ile Leu His Leu Val Val Met Asn Phe Val
141           100          105          110
143 Gly
147 <210> SEQ ID NO: 5
148 <211> LENGTH: 1077
149 <212> TYPE: DNA
150 <213> ORGANISM: Homo sapiens
152 <400> SEQUENCE: 5
153 cttatccctg cgtagaaacg cctgccaatg ctttctcatt tggacccaga ctccagatcg 60
154 ggagcagtct tatagctgga tcagctacca agagaagttg taaaccaaga agagaaaagc 120
155 atttcaattt gggacattta tttgcacctg gaaatgggga atgggctgtc agaccagact 180
156 tctatcctgt ccaacctgcc ttcatttcag tctttccaca ttgttattct gggtttggac 240
157 tgtgctggaa agacaacagt cttatacagg ctgcagttca atgaatttgt aaataccgta 300
158 cctaccaaag gatttaacac tgagaaaatt aaggtaacct tgggaaattc taaaacagtc 360
159 acttttctact tctgggatgt aggtggtcag gagaaattaa ggccactgtg gaagtcatat 420
160 accagatgca cagatggcat tgtatttgtt gtggactctg ttgatgtcga aaggatggaa 480
161 gaagccaaaa ctgaacttca caaaataact aggatatcag aaaatcaggg agtccctgta 540
162 cttatagttg ctaacaaaca agatttgagg aactcattgt cactttcaga aattgagaaa 600
163 ttgttagcaa tgggtgaact gagctcatca actccttggc atttgcagcc tacctgtgca 660
164 atcataggag atggcctaaa ggaaggactt gagaaactac atgatatgat cattaagaaga 720
165 agaaaaatgt tgcggcaaca gaaaaagaaa agatgaatat caatacctat tatactctgtg 780
166 tggagtaggt tttctctggt ctgattttga caaatagaag agtgtctaca ccgtcctttg 840
167 cctgtctgcc ctcttgatg ctattaaagc tttgttttgt tgaacaatca gatgccaac 900
168 tctgttgccct tgtggaagat gagtaaagtc agtgcttctt aaagtgggtct cttctcccta 960
169 cccacaaaat cttttggtac taccatttgg ggaagccaag caaggatagt aaattgacca 1020
170 gaacacagtt gtgggaattt ggtctgaagt tagtgaaata aaactttaaa gagtgtc 1077
174 <210> SEQ ID NO: 6
175 <211> LENGTH: 200
176 <212> TYPE: PRT
177 <213> ORGANISM: Homo sapiens
179 <400> SEQUENCE: 6
180 Met Gly Asn Gly Leu Ser Asp Gln Thr Ser Ile Leu Ser Asn Leu Pro
181   1           5           10           15
183 Ser Phe Gln Ser Phe His Ile Val Ile Leu Gly Leu Asp Cys Ala Gly

```

## RAW SEQUENCE LISTING

DATE: 01/24/2002

PATENT APPLICATION: US/10/029,654

TIME: 18:40:23

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01242002\J029654.raw

```

184          20          25          30
186 Lys Thr Thr Val Leu Tyr Arg Leu Gln Phe Asn Glu Phe Val Asn Thr
187          35          40          45
189 Val Pro Thr Lys Gly Phe Asn Thr Glu Lys Ile Lys Val Thr Leu Gly
190          50          55          60
192 Asn Ser Lys Thr Val Thr Phe His Phe Trp Asp Val Gly Gly Gln Glu
193 65          70          75          80
195 Lys Leu Arg Pro Leu Trp Lys Ser Tyr Thr Arg Cys Thr Asp Gly Ile
196          85          90          95
198 Val Phe Val Val Asp Ser Val Asp Val Glu Arg Met Glu Glu Ala Lys
199          100         105         110
201 Thr Glu Leu His Lys Ile Thr Arg Ile Ser Glu Asn Gln Gly Val Pro
202          115         120         125
204 Val Leu Ile Val Ala Asn Lys Gln Asp Leu Arg Asn Ser Leu Ser Leu
205          130         135         140
207 Ser Glu Ile Glu Lys Leu Leu Ala Met Gly Glu Leu Ser Ser Ser Thr
208 145          150         155         160
210 Pro Trp His Leu Gln Pro Thr Cys Ala Ile Ile Gly Asp Gly Leu Lys
211          165         170         175
213 Glu Gly Leu Glu Lys Leu His Asp Met Ile Ile Lys Arg Arg Lys Met
214          180         185         190
216 Leu Arg Gln Gln Lys Lys Lys Arg
217          195         200

```

220 &lt;210&gt; SEQ ID NO: 7

221 &lt;211&gt; LENGTH: 2379

222 &lt;212&gt; TYPE: DNA

223 &lt;213&gt; ORGANISM: Homo sapiens

225 &lt;400&gt; SEQUENCE: 7

```

226 ggaattccgg tcggcctctc gcccttcagc tacctgtgcg tccctccgtc ccgtcccgtc 60
227 cgggggtcac cccggagcct gtccgctatg cggtccctgc ctctagcccc aggtcgggctc 120
228 cggcggggca gcccccgcca cctgccctcc tgcagcccag cgctgctact gctgggtgctg 180
229 ggcggctgcc tgggggtctt cgggggtggc gcgggaaccc ggaggcccaa cgtgggtgctg 240
230 ctctcacg acgaccagga cgaagtgtc ggcgcatga caccactaaa gaaaaccaa 300
231 gctctcatcg gagagatggg gatgactttt tccagtgtt atgtgccaag tgctctctgc 360
232 tgccccagca gagccagtat cctgacagga aagtaccac ataatcatca cgttggaac 420
233 aacactctgg aggggaactg cagtagtaag tctggcaga agatccaaga accaaatact 480
234 ttcccagcaa ttctcagatc aatgtgtggt tatcagacct tttttgcagg gaaatattta 540
235 aatgagtacg gagccccaga tgcaggtgga ctagaacacg ttcctctggg ttggagttac 600
236 tggatatgct tggaaaagaa ttctaagtat tataattaca ccctgtctat caatgggaag 660
237 gcacggaagc atggtgaaaa ctatagtgtg gactacctga cagatgtttt ggctaattgtc 720
238 tccttggaact ttctggacta caagtccaac tttgagccct tcttcatgat gatcgccact 780
239 ccagcgcttc attcgcttg gacagctgca cctcagtacc agaaggcttt ccagaatgtc 840
240 tttgcaccaa gaaacaagaa cttcaacatc catggaacga acaagcactg gttaattagg 900
241 caagccaaga ctccaatgac taattcttca atacagtttt tagataatgc atttaggaaa 960
242 aggtggcaaa ctctcctctc agttgatgac cttgtggaga aactggtcaa gaggtggag 1020
243 ttactgggg agctcaacaa cacttacatc ttctatacct cagacaatgg ctatcacaca 1080
244 ggacagtgtt ccttgccaat agacaagaga cagctgtatg agtttgatat caaagttcca 1140
245 ctgttggttc gaggacctgg gatcaaacca aatcagacaa gcaagatgct ggttgccaac 1200
246 attgacttgg gtcctactat tttggacatt gctggctacg acctaaataa gacacagatg 1260

```

## RAW SEQUENCE LISTING

DATE: 01/24/2002

PATENT APPLICATION: US/10/029,654

TIME: 18:40:23

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01242002\J029654.raw

```

247 gatgggatgt ccttattgcc cattttgaga ggtgccagta acttgacctg gcgatcagat 1320
248 gtcctgggtg aataccaagg agaaggccgt aacgtcactg acccaacatg cccttccctg 1380
249 agtcctggcg tatctcaatg cttcccagac tgtgtatgtg aagatgctta taacaatacc 1440
250 tatgcctgtg tgaggacaat gtcagcattg tggaatttgc agtattgcga gtttgatgac 1500
251 caggaggtgt ttgtagaagt ctataatctg actgcagacc cagaccagat cactaacatt 1560
252 gctaaaacca tagaccacaga gcttttagga aagatgaact atcggttaat gatgttacag 1620
253 tcctgttctg ggccaacctg tcgcactcca ggggtttttg accccggata caggtttgac 1680
254 ccccgctctc tgttcagcaa tcgcggcagt gtcaggactc gaagattttc caaacatctt 1740
255 ctgtagcgac ctcacacagc ctctgcagat ggatccctgc acgcctcttt ctgatgaagt 1800
256 gattgtagta ggtgtctgta gctagtcttc aagaccacac ctggaagagt ttctgggctg 1860
257 gctttaagtc ctgtttgaaa aagcaaccca gtcagctgac ttctcgtgac aatgtgttaa 1920
258 actgtgaact ctgcccattg gtcaggagtg gctgtctctg gtctcttctt ttagctgaca 1980
259 aggacactcc tgagggtctt gttctcactg tatttttttt atcctggggc cacagttctt 2040
260 gattattcct cttgtggtta aagactgaat ttgtaaaccc attcagataa atggcagtac 2100
261 tttaggacac acacaaacac acagatacac cttttgatat gtaagcttga cctaaagtca 2160
262 aaggacctgt gtagcatttc agattgagca cttcactatc aaaaatacta acatcacatg 2220
263 gcttgaagag taaccatcag agctgaatca tccaagtaag aacaagtacc attgttgatt 2280
264 gataagtaga gatacatctt ttatgatgtt catcacagtg tggttaagggt gcaaattcaa 2340
265 aacatgtcac ccaagctctg ttcatgtttt tgtgaattc 2379

```

269 &lt;210&gt; SEQ ID NO: 8

270 &lt;211&gt; LENGTH: 552

271 &lt;212&gt; TYPE: PRT

272 &lt;213&gt; ORGANISM: Homo sapiens

274 &lt;400&gt; SEQUENCE: 8

```

275 Met Arg Leu Leu Pro Leu Ala Pro Gly Arg Leu Arg Arg Gly Ser Pro
276 1 5 10 15
278 Arg His Leu Pro Ser Cys Ser Pro Ala Leu Leu Leu Val Leu Gly
279 20 25 30
281 Gly Cys Leu Gly Val Phe Gly Val Ala Ala Gly Thr Arg Arg Pro Asn
282 35 40 45
284 Val Val Leu Leu Leu Thr Asp Asp Gln Asp Glu Val Leu Gly Gly Met
285 50 55 60
287 Thr Pro Leu Lys Lys Thr Lys Ala Leu Ile Gly Glu Met Gly Met Thr
288 65 70 75 80
290 Phe Ser Ser Ala Tyr Val Pro Ser Ala Leu Cys Cys Pro Ser Arg Ala
291 85 90 95
293 Ser Ile Leu Thr Gly Lys Tyr Pro His Asn His His Val Val Asn Asn
294 100 105 110
296 Thr Leu Glu Gly Asn Cys Ser Ser Lys Ser Trp Gln Lys Ile Gln Glu
297 115 120 125
299 Pro Asn Thr Phe Pro Ala Ile Leu Arg Ser Met Cys Gly Tyr Gln Thr
300 130 135 140
302 Phe Phe Ala Gly Lys Tyr Leu Asn Glu Tyr Gly Ala Pro Asp Ala Gly
303 145 150 155 160
305 Gly Leu Glu His Val Pro Leu Gly Trp Ser Tyr Trp Tyr Ala Leu Glu
306 165 170 175
308 Lys Asn Ser Lys Tyr Tyr Asn Tyr Thr Leu Ser Ile Asn Gly Lys Ala
309 180 185 190
311 Arg Lys His Gly Glu Asn Tyr Ser Val Asp Tyr Leu Thr Asp Val Leu

```

VERIFICATION SUMMARY

DATE: 01/24/2002

PATENT APPLICATION: US/10/029,654

TIME: 18:40:24

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\01242002\J029654.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number  
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date